

BINARY HYSTERESIS EQUAL COMPARATOR CIRCUITS AND METHODS

ABSTRACT

Binary hysteresis equal comparator circuits and methods. An equal comparator does not indicate an equal condition until the two binary input values are exactly the same. However, after the two binary input values first become equal, a window of variation comes into effect, within which the first of the two values is allowed to vary while the circuit continues to report an equal condition. This window can extend only above the equal condition, only below the equal condition, or both above and below the equal condition. The width of the window is determined by providing one or two predetermined constant values, a first constant defining the amount of hysteresis provided above the second value, and a second constant defining the amount of hysteresis provided below the second value. Related methods are also described of performing equal comparisons while providing binary hysteresis.